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# The Sanitarium Bath and Treatment Rooms

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RUSSIAN BATH,
RIECTRIC TUB BATH
MEDICATED BATH
SITZ BATH
NAUHEIM BATH
SPRAY BATH
GRADUATED BATH
NEUTRAL BATH,
FOMENTATIONS,
BLANKET PACES

SHEET PACKS,
PERCUSSION DOUGHE.
FILIFORM DOUGHE.
ALTERNATE DOUGHE
REVULSIVE DOUGHE
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SCHOTT'S RESISTIVE MOVEMENTS
EXECUTED:

What More Could be Asked?

Sanitarium Bath and Treatment Rooms, 75, Park St., Calcutta

# Herald of Health

Vol. 2

Lucknow, April, 1911

No. 4

## Liver Abscess

Abscess of the liver is a condition common in tropical climates, and like all other abscesses is due to the action of pus-forming germs which may enter the liver from several sources; as the lungs, the stomach, or the intestines. Under normal conditions the liver tissues are able to successfully cope with germs; but when the vitality of these tissues becomes lowered, the germs gain a ready foothold.

"The liver is the largest gland of the body, weighing in the adult, three and one-half pounds. The liver is a faithful porter, receiving foods for the needs of the body, and inspecting each portion critically. All food absorbed and carried to the liver does not pass at once into the blood. Starch, as such, is not found in the blood. It is absorbed as maltose inverted, and is carried to the liver, where it is again changed into starch, but this time it is called liver starch, or glycogen. Glycogen is stored in the liver, and when it is needed in the body, it is changed again into sugar, and passed on into the blood."

"The liver serves as an important storehouse, where food is held for an emergency. Reserves are kept for the muscles and every organ of the body. The liver acts as a commissariat for the muscles. Every time a muscle contracts, the liver doles out to it a certain amount of liver starch, in the form of sugar. Hence, it is obvious that exercise is absolutely necessary to a healthy.

active liver. Imagine the condition of the liver of one who eats freely, but who leads a sedentary life. The liver regards every harmful substance as an enemy, and does its best to keep it out of the body, or to break it up into substances less dangerous. The man who smokes or chews tobacco is saved from death because these faithful little workers change as much of the nicotine as they can into other substances."

"This power of the liver cells to destroy poisons is constantly recognized by physicians. A drug injected under the skin passes directly to the brain and the heart and hence produces a much more rapid and powerful action. The same drug given by mouth is much slower in action, and a large dose is required; for the liver will destroy a certain part of it. The venom of a snake that would cause death within a minute if introduced through the skin, is harmless if swallowed; for it must pass the liver. where it is destroyed. However, there is a limit to the poison-destroying capacity of the liver. As a rule, the liver cells are greatly over-worked. Most people eat more than is necessary: hence these faithful inspectors have more than they can do, and many things slip into the blood without being passed upon. Moreover, the liver becomes tired from constant over-work. gets behind, and finally is completely discouraged. Then comes toxemia. which means poisons in the blood."

If the individual should contract dysentery, typhoid, or malaria while the liver is in this debilitated state, the chance of developing abscess of the liver is very great. This relation of unphysiological practices as a predisposing cause to abscess of the liver explains why this condition is much more frequent among Europeans than among Indians in tropical countries. Sir Patrick Manson says:—

"Though common in Europeans in the tropics, liver abscess is rare among the natives. Thus, in the native army of India the proportion of deaths from liver abscess to the total mortality in 1894 was only 0.6 per cent; whereas in the European army it was 7.4

per cent. Man for man, the relative liability of the European soldier and the native soldier was as 95.2 to 4.8."

"The foregoing consider a tions seem to indicate that for the pro-

duction of liver abscess at least two things are necessary, a predisposing cause and an exciting cause."

"As liver abscess is developed principally in tropical climates and in European visitors there, and much more rarely in the native, it would seem that tropical conditions in those unaccustomed to them are in some way bound up with this predisposing element; and as liver abscess is rare in European women and children, it would seem that these conditions are in some way especially operative on European men. We have therefore grounds for concluding that, in addition to general tropical conditions, it must be the greater amount of exposure to which

men, as compared with women and children, are subjected in the course of their business and amusements; or some other condition, especially that one which is relatively more common in men than in women and children. over-indulgence in stimulating food and alcoholic drinks, that constitutes this predisposing cause. Intemperate habits and exposure, doubtless, lead to special liability in men to a hyperamia and congestion of the liver tissue by which its resistive faculty to pathological influences is impaired. In these circumstances, pathological influences which in the healthier condition of the organ such as we assume to exist more generally in natives and in

European women and children would have been successfully overcome, guin the upperhand and lead to suppurtive disintegration of the organ. In support of this view we have the

statement of Waining that 63 per cent. of liver abscesses observed by him were in alcoholics; and it is also said that when the native takes to European habits in the matter of eating and drinking, his liability to liver abscess is greatly and proportionately increased."

"I conclude that in the vast majority of instances the exciting cause of liver abscess is dysentery; the predisposing cause hyperamic, congestive, or degenerative conditions incidental to tropical life, supplemented by such things as exposure and unphysiological habits in eating and drinking."

We can not violate the laws of health without paying the penalty.



#### Treatment

When pus has developed in the liver the only remedy is to drain the abscess; delay in securing this at the earliest possible moment is to court death. Abscess may be avoided in many cases by overcoming congestion of the liver before pus develops. This is most successfully accomplished by large hot fomentations over the liver and abdomen, followed by a hot blanket pack to the entire body, and finishing with a cold mitten friction. Repeat this treatment two or three times in the twenty-four hours. Keep the patient in bed and feed only fruit juices for several days; also have him drink freely of water. The bowels should be thoroughly emptied by means of sodium sulphate and copious hot enemas.

## Sunshine and Fresh Air

John N. Quinn

According to statistics gathered during the last few years, it would seem that the death rate from tuberculosis in India is about double that of Europe. Surely this is reason sufficient for an active campaign against tuberculosis.

Sunshine, fresh air, nourishing food, and moderate exercise are the enemies of this dread disease. When we exclude the sunlight from our homes, how quickly they become musty. mouldy, stale; how soon the flowers lose their cheery colours, and their leaves wither and die! So also with our bodies. If we shut ourselves away from the life-giving rays of the sun, we becomes anæmic and weak, and life becomes a burden. Our step loses its buoyancy, our cheeks their colour. our face its smile; out of our heart goes the joy of living; our tongue withholds the words of cheery greeting, and, instead, words that are crabbed, sour, and disagreeable leave our lips.

The very abundance of the air with which God has provided us suggests its necessity in the maintenance of health. A few facts may help to emphasize the importance of using this gift from God more abundantly than we do:—

It is estimated there are seven hun-

dred twenty-five million air-cells in the lungs, which expose not less than one thousand four hundred square feet of surface to the air taken in during one respiration.

The lungs absorb from fifteen to thirty-five per cent. of oxygen, which purifies and vitalizes the blood.

The weight of oxygen absorbed by the lungs is about sixteen thousand grains every twenty-four hours, or about twice the weight of the solid food taken into the stomach.

All the blood passes through the body every forty to fifty heart-beats. Should we compel the blood to pass through the lungs three or four times without permitting it to come in contact with fresh air, death would result.

We breathe from forty to sixty per cent. more air when expanding and contracting the chest; therefore another good habit to form is that of deep breathing.

We can go without food for weeks and without water for days; but let one hold the breath even a fraction of a minute, and distress will follow.

As we look into the pale, wan face of the consumptive, who is slowly dying, we can see the dreadful effect of oxygen starvation.

Deep breathing, Indian club swinging, and slow running, are excellent methods to be employed for the increase of the action of the diaphragm.

When one breathes correctly and fully, the black, venous blood, foul with the ashes of burned-up brain cells and debris of worn-out tissues, is transformed by the lungs at every breath into pure, bright, red blood. Therefore breathe, breathe deeply.

and keep on breathing if you wish to know the joy of pure physical life.

Do you have that tired feeling? are you troubled with the "blues"? then go out into God's great ocean of air and breathe it in to your lung capacity. In a short time the poisons will be eliminated, and you will become joyous and light-hearted.

Breathe, breathe, BREATHE.

## Anto-Intoxication or Self-Poisoning

Alfred B. Olsen, M. D., D. P. H.

Or the various forms of auto-intoxication, it is that one which is due to the absorption of poisons formed in the intestinal canal, through the action of germs, which we shall here briefly discuss. Although this is perhaps one of the most common forms of selfpoisoning, but little attention is paid to it. Many people suffer from headaches, backaches, and various other aches and pains, from drowsiness, from a feeling of languor amounting sometimes even to stupor, from general inactivity, and a want of fitness, all of which symptoms can be ascribed to auto-intoxication.

#### Fermentation of Food

When food is taken into the alimentary canal it begins to undergo digestion at once, under normal conditions. But if the digestive processes are slow and uncertain for any reason, the germs already in the intestinal canal, or those which accompany food, begin their activities. The result is an abnormal process called fermentation, which is due to the action of the germs. Instead of being digested and prepared to nourish the body, the food is decomposed by the germs, and various processes of decay take the place of ordinary digestion.

## Fermentation Products

This means the production of certain

fermentation products, all of which are more or less injurious, that is, poisonous, to the human system. The action of germs upon food, and particularly upon nitrogenous food, such as animal flesh, is a putrefactive one, and the stomach and intestines become the seat of putrefaction instead of digestion. Some of the putrid bodies which are formed are exceedingly poisonous and cause intense irritation in the stomach and bowels, and may lead to violent vomiting and purging. But although most of them are far less violent in their action, their influence upon the system is anything but benign, and they are often the cause of much physical discomfort and annovance, the causes of which are little understood by the average patient.

### Constipation

If. in addition to these fermentation processes which are going on in the intestinal canal, the bowels are also constipated, the harmful effects are proportionately magnified; for this means that there is every inducement possible for the absorption of the poisonous products. A daily evacuation of the bowels is essential to good health, and would aid much in mitigating the evils of fermentation.

#### Flatulence and Wind

In the putrefactive processes men-

tioned before there is often a production of more or less offensive gases, which cause the well-known symptom called flatulence. and sometimes lead to the belching of wind. The presence of these gases in the stomach and bowels may cause a good deal of disturbance and also considerable pain at times. But let no one think that the absence of flatulence and wind means also the absence of fermentation and putrefaction; for this is by no means the case. Some of the worst forms of putrefaction that take place in the alimentary canal are not accompained by any perceptible formation of gas.

#### Preventive Measures

Aside from the accidental use of spoilt food, the two chief causes of intestinal putrefaction are, first, overindulgence in flesh foods, and, second, overeating of food, especially proteids. Prof. Chittenden, of Yale University, has made a special study of the quantity of nitrogenous food required by the average man or woman. His conclusion is that the amount ordinarily taken by most people is altogether out of proportion to the requirements of the body, and that the surplus makes for ill health and disease. According to Chittenden, ten per cent, of the food which the body requires should consist of proteids; such as, the albumen of egg, the gluten of wheat, the legumin of haricot beans, etc.

The truth is that those who indulge in flesh food to any extent are almost certain to take more nitrogenous food than they require. Practically speaking, lean beef consists of proteid only, aside from the large amount of water that it contains. Ordinary bread, and especially wholemeal or brown bread, contains about the proper proportion of nitrogenous and non-nitrogenous

material. Both eggs and milk are rich in proteid, and the same is true of haricots, lentils, and dried peas. All nuts, except Italian chestnuts, contain a large percentage of proteid. On the other hand, fruits and most vegetables as well, contain but a trifling amount of nitrogen. Rice is a distinctly farinaceous food, and so are potatoes.

#### The Benefits of Exercise

Besides regulating the diet and omitting entirely, or at least to a large extent, flesh foods, physical exercise is necessary for good digestion. Such exercise means a large increase in the intake of oxygen, and this brings about a corresponding increase of oxidation. so that many of the poisons which are assimilated into the system are readily burned, that is, oxidized. The presence of an abundance of oxygen in the tissues means a more complete oxidation of the food material used by the body. Consequently there will be less of these poisons formed in the tissues themselves as a product of incomplete metabolism. Furthermore. the digestive processes will be more active, and there will be less chance for the putrefactive germs to do harm.

## Bathing

Tepid, cool, or cold baths and cold sponging are also useful in increasing the oxidation process of the body. They serve to stimulate both respiration and circulation, and their general influence is to vitalize the tissues and strengthen the resistive forces of the body. Warm and hot baths, on the other hand, such as electric light, Turkish, and vapour baths, improve the eliminative processes of the body, and help to get rid of waste or effete matter that may have been absorbed from the alimertary canal, or result from imperfect metabolism. A good sweat assists much in purifying the blood.

## Insanity, Physical Degeneration, and Alcohol

THE recent report of the Commissioners in Lunacy provide some truths for consideration. The Commissioners state that alcohol ranks fourth as a cause of insanity. It is lamentable to read in this report that at the present time there are 130,553 certified lunatics in England and Wales, and that alcohol is one of the prominent causes which led to the mental disease of these unfortunate beings. Still more unsatisfactory is it to learn that the number of insane is steadily increasing. Since the year 1859 the population of England and Wales has increased by 83.7 per cent.

Nor does an examination of the statistics for the last period of ten years suggest that there is any diminution of the rate of increase of insanity. Taking the last decade, the increase in the number of those certified as insane is as follows:—

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Year	Insane	*Increase	†Total Increase
1900	106,611	-	_
1901	107,944	1.2	1.2
1902	110,713	2.6	3.8
1903	113,964	2.9	6,9
1904	117,199	2.8	9.0
1905	119,829	2.2	12.4
1906	121,979	1,8	14.4
1907	123,988	1.6	16.8
1908	126,084	1.7	18.2
1909	128,787	2.1	20.8
1910	130,553	1.4	22.4
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\* Per cent of increase over that of the preceding year.

† Total per cent. of increase from the year 1900.

The Commissioners state that alcoholism is fourth in the list of the chief causes of insanity. Epilepsy is placed second on the list, and we must remember that parental intemperance leads to ill-nourished children, predisposed both to physical and mental disease.

We are faced with the fact that al-

cohol is a potent cause of insanity and physical deterioration. Herein lies a national danger, the importance of which is perhaps scarcely realized. We are apt in considering the social, to overlook the biological aspect of the problem.

These physical and mental degenerates bring into the world other physical and mental degenerates, useless to their country and a burden to their fellow citizens. The trend of legislation, free feeding, medical inspection, and medical treatment of school children assists in the preservation and propagation of a class of citizens who are not only of no value, but a burden to the rest of the community. a burden which in some instances, at least, is a cause of the diminishing birth rate among the better class of citizens. It is more than doubtful whether the evils to which we refer can be remedied by legislation of any kind. The only apparent remedy is education and diffusion of knowledge. While education of the children is important, it will be of little avail unless we endeavour also to educate the parents. Of Royal Commissions, committees of inquiry, and blue books, there is no end. Would that our legislators would spend some of the money expended on these things on the dissemination of practical knowledge.-The Medical Temperance Review.

"No one fact other than the hard fact of poverty itself, confronts social workers, in whatever particular field they may be engaged, so constantly as alcoholism. The drunkard's family has ever been the insoluble problem in home relief, public and private."

## Some Often-overlooked Rules of Health

Mary W. Paulson

Physical deformities not only interfere with the outward appearance of an individual but also greatly prevent normal action of the internal organs. A person with a flat chest, round shoulders, and a posterior curvature of the spine can not be healthy. A flat chest prevents deep inspiration.

Experiment with yourself. Try to take a deep breath with your chest dropped. You will find that you can

take but a very shallow breath. Lift up your chest, and you will find you will be able to take a much deeper breath. This little experiment gives one an idea of the conditions which are constant with one who has a flat chest.

As a result of the shallow breathing, the foundation is laid for chronic diseases, —auto-intoxication, tuberculosis, etc. Together with the flat chest we very frequently notice relaxed abdo-

men, oftentimes protruding. This deformity means a serious condition inside. The vital organs located in the abdomen, such as the stomach, liver, kidneys, and the intestines, are dependent upon good, tense abdominal muscles to hold them in position.

If the abdominal muscles are relaxed, as they must necessarily be in case of protruding abdomen or curvature of the spine, the viscera of the abdomen becomes gradually displaced downward, thus making a diseased condition of those organs and greatly interfering with their function.

Many people with pain in the back, between the shoulders, or in the small of the back need to have their abdominal muscles strengthened and their prolapsed organs replaced, and to generally get straightened up.

These muscles become weak from

various causes, from wrong positions of standing and sitting, from wearing of clothing which prevents the use of the muscles, and so the individual gradually falls into decay. Chronic invalidism follows as a result.

Children develop these deformities early in life. In school they are not furnished the proper seating, so that we often find them sitting on one side, with one arm elevated over the desk Or sometimes a child



LEG EXERCISE

is allowed to form the habit of standing on one foot.

This condition may be corrected in the child by furnishing him with exercises where he supports the body by hanging with his hands; such as, a trapeze, or a swing, or a ladder.

For development of the chest, no exercise is better than that of deep breathing after putting yourself into a normal position by throwing the weight of the body on the balls of the feet, pushing the chest apward and forward and hips backward, raising the arms straight out shoulder high and rotating them backward. The abdominal muscles can be strengthened by combining with this movement the

leg raising exercise when lying down, and when standing, maintaining an erect and straight position of the body. Much can be accomplished for chronic conditions by simply developing muscles which lack development, and by correcting such common deformities as those aforementioned.

## Healing in Old Tibet

THE ancients, priests and savants, of Tibet were skilful physicians, says the Pall Mall Gazette, when almost the whole of Europe was overrun by ignorant savages or semi-civilized barbarians.

The Russian Government recently received a petition from the Siberian Buddhists requesting that medical schools be established among them in which the ancient Tibetan art of healing should be taught. In consequence of this strange petition the Medical Academy of St. Petersburg has been making investigations concerning the claims of the aucient Tibetan art of healing.

A Tibetan handbook of medicine which was known and used about 1,200 years ago and even then was regarded as an "ancient" and venerated source of knowledge, was used as material for the investigation. The Russian academicians have thus made the astonishing discovery that this book described drugs and cures which European physicians "discovered" many hundred years afterward.

Thus the doctors of Tibet so many centuries ago were not only acquainted with the secrets of the entire human anatomy,—how many bones there are in the human body, etc., the principal nerves namely, ninety-nine—but knew that the skin contained eleven million pores. According to this venerable book, "the heart is king of all

the organs and the support of life." "Sicknesses in general originate owing to the evil and ignorance of human beings, especially owing to their inability to overcome their passions, which disturb the healthy nourishing of the human organs. All evil thoughts also have a harmful influence on the heart and liver."

The physicians of Tibet 1,500 years ago employed the same means of diagnosing the condition of a sick person as the physicians of the present day .they felt the patient's pulse, looked at his tongue, etc. Among the "remedjes" which they recommended were not only vegetarian diet, baths, compresses, but also massage and cupping. What is more remarkable is that physicians who did not keep their instruments quite clean were severely punished. ancient Tibetans were in this respect extremely modern. The old Tibetan medicine book prescribes that healthy persons should "lead an orderly, sensible manner of life, avoid all excesses and irregularities, also conscientiously cherish, keep clean, both soul and body."

"Professor Gaffey reports that there are no published accounts of the transmission of typhoid fever by butter or cheese. In cheese the typhoid bacilli are rapidly killed by the acids, so that they can not be detected after the third day."



## A Dinner Menu

GREEN PEA SOUP
POTATO PUFF COCOANUT CABBAGE
WALNUT CROQUETTES-TOMATO CREAM SAUCE
APPLE AND ONION SALAD
PRUNE WHIP CUSTARO SAUCE

#### Green Pea Soup

Gently simmer two quarts of hulled peas in sufficient water to cook, leaving almost no soup when tender. Rub through a colander, moistening if necessary with a little cold milk. Add to the sifted peas an equal quantity of rich milk and a small onion cut in halves. Boil all together five or ten minutes, until the soup is delicately flavoured, then remove the onion; add salt if desired, and serve. If preferred, a half cup of thin cream may be added just before serving. Celery may be used in place of the onion, or both may be omitted.

#### Potato Puff

Boil or steam Irish potatoes and mash free from lumps. Into each pint whip one-half cup of cream, the yolk of one egg, and salt to taste, Lastly fold in the well-beaten white. Turn at once into an oiled, shallow tin; do not smooth or press them down but leave in a rocky form.

Bake about ten minutes, or till a delicate brown, and serve at once.

#### Walnut Croquettes

1 cupful chopped English walnuts, 1 cupful mashed potatoes, 1 teaspoonful salt. 1 cupful soft bread crumbs.

Yolks of three eggs well beaten.

t teaspoonful grated onion.
Mix together thoroughly, shape into

any desired form, and bake in a moderate oven twenty to thirty minutes.

### Tomato Cream Sauce

11/2 cups strained tomato.

% cupful cream.

1/4 cupful flour,

1/2 teaspoonful salt,

1 teaspoonful sugar.

Use either freshly cooked or tinned tomatoes. Drain off the juice and put the pulp through the colander. Measure the desired amount of the pulp and heat to boiling. Moisten the flour with a little of the cold cream and add slowly to the boiling tomatoes, stirring constantly. Add seasoning and remainder of cream. Cook five minutes and serve with the croquettes.

## Apple and Onion Salad

To two cupfuls of chopped tart apples add thinly-sliced new onions for flavouring. Dress with mayonnaise to which has been added sweet cream and a little sugar.

## Prune Whip

Wash thoroughly one-half pound of prunes and soak over night in enough cold water to cover; cook gently in the same water until the prunes are tender and the juice is nearly absorbed. Then, rub through a colander. When cold, add two tablespoonfuls of sugar, a little lemon juice, and the stiffly-beaten whites of three eggs. Stir all well together, pile lightly in a buttered pudding dish, and bake about ten minutes. Serve with whipped cream or boiled custard sauce.



## Occupations and Amusements for Convalescent Children

Iona Gratia Wilkins

THE hardest work in the care of children is not when they are seriously sick; for then the child's chief desire is to be "let alone," and judicious letting alone, by the way, is a fine point. The really hard work comes later, when convalescence smiles around the bend in the road to recovery and the spirit of youth comes back to its own, eager to be up and doing, intolerant of tedious delays and restraints. There are hours of fretfulness and irritability when one has to push hard against embryonic black clouds; fresh games must be invented when the old ones pall, for the boredom bacillus must never be allowed to infest the tiny lad's land of getting well.

Keep your children busy, keep them interested, throw yourself into the spirit of their funny little games, play with them—you lose no dignity in this way.

One thing which appeals to nearly all children is story telling. From the little tots, who listen eagerly to the adventures of Prince Fairyfoot in the enchanted forest, to the older ones who appreciate word pictures, there is not one who will not yield to the magic.

Told stories seem to children more real and more intimate than those read from a book, and their uses are endless. Many glasses of milk have gone down unwilling little throats because, when the last drop was swallowed, the wonderful "Tar Baby" would be told; many a child has taken willingly a rest hour in the middle of the afternoon, knowing that in the quiet of the darkened room someone would sit by the bed and recite verses from Eugene Field's "Love Songs of Childhood." The antics of Br'er Fox and Br'er Rabbit have often distracted attention from tangles in curly hair, and at night the sandman steals in unawares, under cover of the dear old Bible stories.

A promissory note made out in due form for two stories, payable on demand, is very comforting to think of while a disagreeable treatment is in progress.

Dolls and their accessories always have a warm place in the hearts of little girls, and the suggestion of making a nurse dolly with a "really truly" cap usually meets with warm approval. The top of a long, deep pasteboard box (one in which coats and suits are packed) with one side removed, makes an ideal hospital ward where little stray dolls with broken arms and legs may come to be bandaged and properly treated. In that case, a doctor's services are necessary, and he can be made truly impressive in a white suit with a red cross on the arm.

Matches, with the sulphur end removed, can be whittled into thermometer shapes, and marked off with pen

and ink, and soda straws, cut in the proper lengths, make excellent feeding tubes. Once established, this doll hospital will keep the little patient busy for some time each day; for, of course, the affected ones must have temperatures taken, baths given, and the doctor makes many rounds. Weird prescriptions are sometimes given. "This lady has a bad headache," complained the doll nurse. "Give her four teaspoons of mucilage every morning," commanded the oracle."

Blowing soap bubbles is a good way to pass an hour or two, particularly if the child is well enough to participate in the fun and some other member of the family can be induced to enter the lists. Lukewarm soapsuds, to which has been added a little glycerine, I have found a satisfactory "bubble solution." Offer prizes for the largest bubble, the prettiest one, the one that lasts the longest, etc. An open window may invite the floating spheres to set out on an aerial trip, leading to stories of where they went, what they found, and what finally became of them.

Did you ever try "combination drawing"? The first person draws a head of some sort, and folds over the paper, leaving two dots to show where the body should be attached. The second person draws the body, folds over the paper, and an obliging third puts on the legs. It doesn't sound so funny, but wait till you get a donkey's head on a cat's body, supported by chicken legs, and see if your small child doesn't like it.

Modelling in clay is usually enjoyed by older children. If you have not the wooden tools which come with the coloured clays, a penholder may be whittled into a spatula, etc. There are everal substitutes for clay for sale in

the toy shops which can be used to advantage because they do not need to be kept damp.

Making scrap books is a popular amusement, and is particularly interesting when the child is making them for some other little boy or girl less fortunate than himself. The picture puzzle craze still exists among the little folks, and new puzzles may easily be made by pasting magazine covers on stiff cardboard and cutting it into sections; or, if a little education is not objectionable, maps may be made in the same way.

Convalescent children usually enjoy their food; but occasionally we find some who are disinclined to eat; especially such things as milk, eggs, etc. When one of these is to be taken from a glass, paste a round piece of paper to the bottom of the glass, enclosing between the glass and the paper a surprise which may be a nickel or a penny, a small picture, a peppermint wafer, and so on; and the glass will usually be emptied promptly to see what the surprise is.

Eggs or broth, etc., may sometimes be prepared in a chafing dish while the child watches the proceeding, something the average child dearly loves. Plain boiled eggs take on an added charm if they are coloured. Baked potatoes mashed into shape of a piece of pie, an orange with the sections skinned and laid in succession around a mould of powdered sugar, strips of bread and butter built into a "corncob" house with a berry or bit of jelly or sugar at the bottom inside,-these or any other new way of serving the food stimulate the child's interest and act as a wonderful spur to jaded appetites

Last spring a little child of six developed miocarditis. The poor baby could not understand why she must stay lying down in bed when she felt perfectly well. "My dear," I said, "did you ever run and run and run until you were just all tired out and had to lie down on the grass and rest?" "Oh yes." "Well," I went on, "when you were resting, wouldn't you have thought it pretty mean if someone had come along and made you run some more? When you had fever that little heart of yours just ran as fast as it could night and day, and now it is very tired and needs a rest, and every time you sit up or cry, or reach out

of bed, your heart feels just the way you would if someone made you keep on running." "Oh," very seriously, "I wont be mean to it any more," and for days the little head lay patiently on the low pillow.

Study your child. I doubt if this world holds anything more satisfactory than these little sojourns in the children's country where one forgets "envy, hatred, malice and all uncharitableness," and possibly catches a reflection of that love which made the presence of little ones forever blessed.

## The Intelligent Use of Natural Agencies

Use of Tonic Hydrotherapy

Water is a most valuable remedial agent. By hydrotherapy we mean the application of water to the body

for the purpose of treating disease. By tonic hydrotherapy is meant short applications of cold water to the body; that is, the application of cold water to the body for the fraction of a minute, or a few minutes' duration, these applications to be repeated frequently. Tonic hydrotherapy can be best applied to the body in the form of the cold wet hand rub, the cold wet towel rub, the cold mitten friction, the cold spray, the cold douche, or cold plunge. The manner of application will lepend upon the condition of the patient. If the patient is feeble and weak, the milder forms should be used; such as, the wet hand rub, wet towel rub, or cold mitten friction. If the patient is stronger and has a good degree of vitality, more strenuous methods may be used; such as, sprays, showers, full bath, plunges, etc. It is importent to emphasize the fact that

it is the cold in the water that does the good to the patient, not the water itself. The water is simply a vehicle of carrying the cold. It is the applica-



WET TOWEL RUB

tion of the cold to the body which stimulates the vital processes of the body and benefits the patient.

These short cold baths act as a tonic to the entire body. The function of every organ in the body is improved by the application of cold water to the body in the form of short applications. Given in the manner as indicated before, they increase the force and lessen the rate of the heart beat, increase the vasomotor tone, tone up the blood vessels, increase blood pressure, and improve the circulation of the blood. The short cold bath also increases the number of white and red cells in the blood by stimulating the blood-making organs. The short cold bath increases the respiratory function, increases the amount of air taken into the lungs, increases the absorption of oxygen into the blood and tissues of the body, improves the appetite, increases the digestive function, improves the muscular tone of the stomach and bowels, improves the circulation of blood through the skin, increases oxidation, increases the function of the kidneys, and improves the metabolism of the body as a whole.

## Use of Massage and Manual or Mechanical Movements of Various Kinds

These remedies improve the circulation of the blood, improve the function of the digestive organs, have a very wholesome and soothing effect upon the nervous system, improve the nutrition of the patient, and improve the tone and strength of the muscles. They should always be administered by a carefully trained nurse or masseur, and should be applied in such a way as to meet the needs and condition of the patient. The manner of administration should depend entirely upon the condition of the patient. They can usually be given daily with good results.

## The Use of Electricity in its Various Forms

The forms of electricity that are generally used are the static, faradic. sinusoidal, and galvanic. The static can be used in the form of the electric breeze over the head and along the spine, and is often very useful in promoting sleep. The faradic and sinusoidal currents are useful in toning up the muscles of the body, and particularly so in stimulating the abdominal muscles, which are often weak and They are also helpful in stimulating the muscular coats of the stomach and bowels to greater activity. and in improving the tone of these organs generally. The galvanic current is useful in relieving pain in the form of neuralgia and irritation along the spinal column, and may also be applied to the head at night for the purpose of producing sleep, often with most satisfactory results.

#### Carefully Regulated Exercise

The value of exercise as a remedial agent is not appreciated by the laity. or even by the profession. Exercise brings about certain definite changes in the function of the body. The changes of functions produced in the various organs of the body by exercise tend always towards an increase of functional activity. Exercise increases the rate and the force of the heart beat, and improves the circulation of the blood. Exercise increases the respiratory function, the air taken into the lungs, the expansion of the chest. the absorption of oxygen into lungs and blood, oxidation in the tissues of the body, the digestive function, the contraction of the muscular coats of the stomach and bowels, the activity of the liver, the secretion of bile, the activity of the kidneys, the function of the skin, and the secretion of sweat, relieves constipation, improves the appetite, improves the nerve tone, and as before stated, increases the function of every organ of the body.

## Therapeutic Possibilities of Fresh Pineapple Juice

Dr. B. G. R. Williams, in The Medical Record for May 28, 1910, discusses the value of fresh pineapple juice as a digestant. His evidently extensive experience shows that pineapple juice is capable of digesting animal tissues. A small amount of the liquid was found capable of digesting considerable proteid. For example: piece after piece of steak added to but a few cubic centimeters of the juice disappeared within a few hours, and yet the enzymes seemed capable of further action when more meat was added.

Boiling kills the enzymes, so that after canning the pineapple loses its digestive powers. The author attempted to prepare a permament preparation of the juice, but was unsuccessful, owing to the unfavourable action of preservatives upon the enzymes.

The therapeutic possibilities of pineapple juice were brought to the author's notice, some years ago, in a case of pharyngeal diphtheria, by its administration in the hands of persons who were sure that it had some advantages over ordinary gargles. He says

that he has never seen a diphtheritic membrane extensive enough to indicate its use, but the circumstances brought to his mind the possible value of pineapple juice not only in certain cases of diphtheria but in other fields. This value depends upon the selective action of broughin, upon its power of picking out nonliving proteins and rapidly digesting them, leaving behind all living tissues, thus differing from the action of salicylic acid and other tissue-solvents.

In cases of quinsy Dr. Williams' experience has been favourable. In such cases pineapple juice digests the necrotic tissue, often giving quick relief.

The author concludes that pineapple juice is superior to pepsin in that it is not nauseating, is more easily obtained and administered, and acts promptly in almost any kind of medium and variation of temperature. It is superior to trypsin and vegetable proteolytic enzymes in that it is more palatable, serving as a dessert rather than a drug, but chiefly in the fact that it is so readily obtainable in its most active condition.

## The Prevention of Typhoid

"Typhod fever is a 'water borne' infection in so great a percentage of cases that if all drinking water were thoroughly boiled or sterilized, the chances of becoming infected would be practically nil. The Japanese have set the military world an example by boiling the drinking water for their soldiers in the late war, thereby securing a most appreciable minimum of diseases that beset the

"The cost of typhoid fever each year amounts to many millions. A limited per cent. of this amount expended on instructing the people in the methods of prevention and the adoption of proper water and sewerage systems would soon put typhoid fever forever

soldier kind during campaigns.

"Know thyself."

in the background."



#### DEATH FROM FIFTEEN GRAINS OF VER-ONAL

THE British Medical Journal records another case of accidental death from veronal poisoning. The number of deaths following the administration of this commonly-used sleep-producing drug has reached an appalling figure, such indeed that the London Lancet recommends that restrictions be placed upon its sale. In this particular instance the victim of the accident was a lawyer who had suffered for some time from insomnia and sometimes took drugs for its relief. At 3 A. M. he took fifteen grains of veronal. At 7 A. M. he became unconscious, and, in spite of competent medical assistance, died about 9 P. M.

## ARTIFICIAL LIFE OF SOCIETY WOMEN DEMANDS STIMULANTS

The London Council for Promoting Public Morality, founded by the Bishop of London, finds that while club and business men drink less every year, many society women have taken to the habit of "nipping" between meals. At a number of so-called confectioners' and tea-rooms women who are known to the managers order tea, and dainty cups and cakes are put before them. The "tea," however, consists of brandy or a cocktail, Many people have remarked that even young girls now drink more champagne at dances and dinner parties than the men.

This condition in high society is not surprising. Indeed, the opposite condition would be remarkable. The artifical habits of modern society,—irregular hours, irregular and promiscuous eating, irregular morality, and unhealthful fashions in dress—demand artifical stimulants of some kind to keep the body machinery going, even though it be at the cost of jaded nerves, a worn-out digestion, and an untimately end.

#### PHYSICAL CAUSE OF DULNESS

A Los Angeles physician examined fifty of the bright and fifty of the dull pupils in the public schools, finding that sixteen per cent, of the bright pupils and eighty-six

per cent. of the dull pupils were suffering from some abnormal condition of the nose, throat, eye, or ear. Unquestionably these conditions have much to do with the production of dulness in children. In many cases where children have had such difficulties remedied, the increase in intelligence has been remarkable.

#### DRUGS

One of the most famous of American medical men bas said that we have but four medicines that we really need, and the less we give of these the better. Another, perhaps the most able diagnostician in the country. in a recent speech before a gathering of leading manufacturers, stated his conviction that ten years hence we would be using practically no drugs whatever. As a physician in active practice, meeting all classes of disease, from searlet fever to insanity. from nervous prostration to adenoids, I have, myself, put the physiologic methods to the severest test. And as a result of all this experience I may state in most positive terms that there is no effect, not one therapeutic or alleviative effect, obtainable by drugs which is not more easily, safely, and rapidly achieved by non-drugging methods. -W- R. C. Latson, M. D.

#### CONSUMPTIVES CAN NOT MARRY

According to the marriage law now in force in the State of Washington, tuberculous patients in the advanced stage can not obtain a marriage license. The law also denies marriage license to sufferers from some other contagious diseases, and to habitual criminals and drunkards.

#### INEBRIETY BILL

A BILL recently passed by the New York legislature provides that inebriates, whether from alcohol or other narcotics, shall be provided with hospital treatment, and work in the open air. A fine is inflicted only after the third offense. This new attitude of the law, regarding the inebriate as an in

(Concluded on Page Sixteen)

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#### INEBRIETY BILL

(Concluded from Page Fifteen)

valid rather than a criminal, is in keeping with modern medical research. The ine-briate needs help, not condemnation; treatment, not imprisonment and punishment. If any one should be punished, it is the man who has made him an inchriate.

## THE ANTI-ALCOHOL MOVEMENT IN EUROPE

They mean lusiness there. Germany has prohibited the sale of spirits to North Sea fisherman while engaged at their trade. Finland proposes to make anti-alcohol instruction obligatory in all schools, high and low, and all teachers must take a special course in "alcohology." The Scottish department of education is preparing a temperance syllabus for use in the Scotch schools. The Swedish government has made an appropriation of more than fifteen thousand rupees for alcohol investigations. The Relgian government gives free postage on all temperance papers.

#### SODA-WATER DANGEROUS

Or sixty-six samples of soda-water examined, eighteen, or more than one-fourth, contained lead. The investigation was undertaken on the complaint of a physician, who observed that children were often taken ill after drinking carbonated water.

#### FOOD PRESERVATIVES IN ENGLAND

The London medical officer of health in a recent report urges that in all cases where preservatives are used in food the purchasers be informed of the nature of the drug used and the amount; and he would make the use of the preservative in milk a penal offense. The departmental committee in 1901, reported in favour of a law regulating the use of preservatives which the government did not pay any heed to, some say because the report was not forcible enough. Dr. Collingsword, the health officer, finds the worst feature to be the use of preservatives in working off tainted meats.

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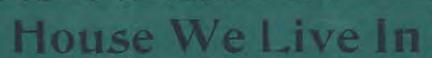
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Pumping Plant		Heart
Bath-Room		The Lange
The Windows		The Eyes
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